

**Recent Advances in Plant Tissue Culture, Volume X, Micropropagation Systems and Technologies 2002–2006**, Edwin B. Herman, Agritech Consultants Inc., Agricell Report, P O Box 225, Shrub Oak, NY 10588, USA, 129 pages, loose leaf, Price US\$99.00 plus shipping and handling (\$8.00 within the U.S., \$15.00 elsewhere), Email: [agritech@agritechpublications.com](mailto:agritech@agritechpublications.com).

This latest volume of the series covers a very large number of topics related to the field of micropropagation. The volume consists of short notes and interesting findings obtained in research laboratories across the world. It is in essence short summaries/abstracts of results relevant to this active and ever expanding field of biotechnology. This makes it a very valuable early reference for students and researchers just entering the discipline. Coverage is given to Micropropagation Systems, Micropropagation Techniques, Acclimatization of Micropropagules, Micropropagation of Specific Plants and Other Applications of Micropropagation in 5 Chapters. Each Chapter has many subheadings that are well worth perusing.

I recommend this book as a standard reference for all teaching institutions.

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**Legumes of the World**, Gwilym Lewis, Brian Schrire, Barbara Mackinder, Mike Lock (Eds.), Royal Botanic Gardens, Kew, ISBN: 1-900-34780-6, Price soft — £55.00 Hard — \$100.65, Internet [www.kewbooks.com](http://www.kewbooks.com) or e-mail [publishing@kew.org](mailto:publishing@kew.org)

Legume Biology has been serviced by a string of 11 core publications under the aegis ‘*Advances in Legume Systematics*’. This massive collaborative effort by legume biologists has generated new insights into legume biology which required consolidation. In the first volume of 1981, a comprehensive overview of classification of the family was published and it provided a cornerstone for future research. One major shortcoming of this edition was its lack of illustrations. In 2001 the expectant legume community awaited the delivery of ‘*Legumes of the World*’ which, at its inception was intended to be a pictorial encyclopedia of the 727 legume genera. Delegates to the Fourth International Legume Conference, ‘*Legumes Down Under*’ went away disappointed. At last in July 2005 *Legumes of the World*, was published and I do not hesitate to say it was worth the wait.

This mammoth work from the pens of 24 authors and 4 editors is a triumph of collective endeavor which makes legume classification available to scientists and will enchant the broader community with its excellent illustrations. The book has received rave reviews and recently claimed the Council on Botanical and Horticultural Libraries 2006 Award for Significant Works in Botanical or Horticultural Literature. It surpasses its pictorial goal by providing a hugely informative text on the spine of an amalgamated super tree.

Any large, widely distributed family poses difficult biogeographic questions. Past hypotheses have been constrained by the technologies of their time and many have fallen into disrepute. The molecular revolution provided researchers with powerful tools to trace immortal gene lineages but molecular biology is not an ersatz for interpretation. Schrire, Lewis, and Lavin, present an engaging discussion of historical and contemporary biogeography of the legumes. They forward a biome-based hypothesis to explain distributional patterns within the family. Time will no doubt test these ideas. The statistics and informative graphics in this section provide a rich source of information especially the Taxon–biome supertree spanning 5 pages.

The bulk of the book covers the classification and generic diversity of the legumes arranged collectively into their tribes and subfamilies. Each tribe is introduced with a cladogram highlighting areas of taxonomic doubt and providing insights into areas of future research. Cross referencing to *Advances in Legume Systematics* 1 (1981) abounds and this is useful especially where tribes have undergone major taxonomic rearrangement. The concise generic accounts have information on synonymy, diversity, biogeography, etymology, ecology and economic uses. They succinctly outline taxonomic controversies within the respective genera.

Encyclopedias can be frustrating when they are inadequately indexed. This volume is serviced by a generic synopsis and 3 efficient indices (to illustrations, vernacular names and scientific names). The relevant taxonomic and phylogenetic literature is cross referenced with an extensive bibliography.

There is no doubt that ‘*Legumes of the World*’ will hold a commanding place on botanical bookshelves of the world. It is a pity that nomenclatural rearrangements have already rendered parts of the book out of date but that is the nature of systematics. A shortcoming of ‘*Legumes of the World*’ is the lack of generic descriptions and keys and this is acknowledged by the editors. While such additions would have raised costs if included in the book, they would have greatly enhanced the volume if included as an electronic accessory and would be a worthy consideration in future editions. Interactive keys such as those of ‘*Wattle: acacias of Australia*’ (2001) must surely be the future of encyclopedic works.

## References

- Maslin, B.R. (Ed.), 2001. *Wattle: acacias of Australia*. CSIRO Publishing Victoria, Australia. ISBN: 0 643 06606 3.